



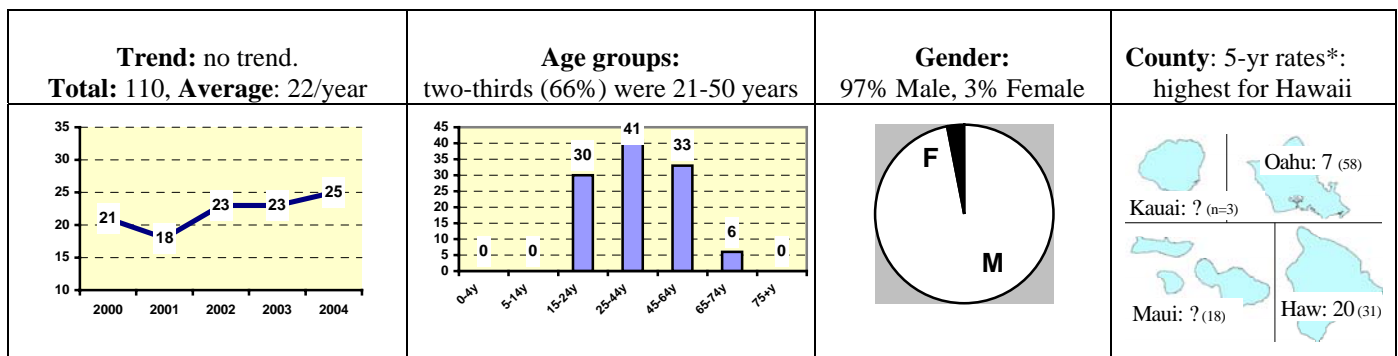
Motorcycle Crash Injury Brief

Injury Prevention & Control Program

Overview of Fatal Injuries

Annual crude rate (1999-2002): 1.4 deaths per 100,000 residents (1.0/100,000 for rest of U.S.)
Hawaii state ranking (1999-2002): 9th highest (SC highest: 1.8/100,000, ND lowest: 0.5/100,000)
Injury ranking (2000-2004): 9th leading cause of fatal injuries, 7th leading cause of unintentional

A total of 110 residents died from motorcycle crashes in Hawaii over the 2000-2004 period, with no apparent trend over those 5 years. Most of the fatally injured motorcyclists were young adult males; half (55) were males aged 21 to 40 years. Over half (58, or 53%) of the fatalities occurred on Oahu, but higher rates were computed for Hawaii County, whether adjusting for resident population or number of registered motorcycles.



*Unadjusted rates per 100,000 residents over the 2000-2004 period. The number of deaths is shown in parentheses.

Contributing Factors

Alcohol was estimated to be involved in half (53%) of the fatalities over the 2000-2003 period (excluding the 24% of crashes for which alcohol status was not known.) Almost half (44%) of the fatally injured drivers were estimated to have been drinking before the crash, and one-third (33%) were estimated to have been legally drunk. Alcohol use was particularly common (55%) among drivers who crashed in the nighttime hours of 8:00 p.m. to 5:00 a.m. Only a minority (27%) of the drivers had been wearing helmets at the time of the crash. Almost half (47%) of the crashes did not involve another vehicle but were due to loss of control of the motorcycle. Speeding contributed to 31% of the fatal crashes. A high proportion (13%) of the victims were military personnel. Helmet use was more likely among military personnel than civilian riders (90% vs. 17%), but military personnel were more likely to have been speeding (60% vs. 26%). Alcohol use was comparable between the two groups.

Non-Fatal Hospitalizations

For every person killed in a motorcycle crash, there are an estimated 15 who are hospitalized for non-fatal injuries in Hawaii, and another 38 who are treated in emergency departments. As for fatal crashes, a large proportion (at least 37%) of crashes requiring hospitalizations did not involve another vehicle. About one-third (32%) were due to “loss of control” of the motorcycle. The age and gender distribution of the patients was similar to fatal crashes: half (52%) were between 21 and 40 years of age, and most (87%) were males. Almost one-fifth (18%) of the patients had a traumatic brain injury (TBI). According to Queen’s Trauma Registry data, only 32% of the injured riders were wearing helmets. The incidence of TBI among non-helmeted riders was almost twice as high as among helmeted riders. Hospital charges totaled almost \$11.4 million per year, an amount that would be approximately doubled if physician charges were included.

Other Data

From Oahu EMS data, the neighborhoods with the highest numbers of motorcycle crashes were Kalihi-Palama, Ala Moana, and the North Shore. Observational studies show helmet use was less than 50% in Hawaii for every year from 1999-2003, less than the national average of 58%. Helmet use is higher on Oahu (5-year average of 47%) compared to Neighbor Islands (28%), but is generally increasing in the latter.